

AMERICAN BEE JOURNAL

DEVOTED EXCLUSIVELY TO BEE CULTURE.

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Correspondence.

Correspondents should write only on one side of the sheet. Their best thoughts and practical ideas are always welcome; no matter how rough, we will cheerfully "fix them up."

For the American Bee Journal. Spring Dwindling.

You may possibly find the following worth a place in your paper:

Much has been said about the dwindling down of bees this spring. I have observed the same phenomenon without finding the solution. I wintered 29 stocks of Italians on summer stands. 3 stocks died in February with sufficient honey. The balance or 26 stocks remained good and lively. I made in May and June 17 new swarms, but the bees would not increase much. Many stocks even seemed to dwindle down in June, when I found one day that a fly of a peculiar long form, caught and sucked my bees. Becoming awake to the subject I found many such bee-killers, who were very greedy on the poor bees. No book or journal speaks of them. At last, I found a description of them in Prof. C. V. Riley's Second Annual Missouri Report, page 121; all three species are there described. I found and killed a large number. At first I found watching on grass, *Evaux Barbardi* and no other. After that disappeared, a similar fly *Asileus Sericeus* and then as *less Missouriensis* appeared. The latter two I found in large numbers on buckwheat and wild flowers. They abound at this day, although I catch with an insect net as many as possible, often 50 in an hour. I am sure these creatures have killed over 100,000 of my bees, and I am convinced, that there is no other bee enemy to be compared with these flies. The swallow's seem to be fond of them, also other birds. This fly will destroy a bee in five minutes. They pounce upon them while alighting on grass or flowers, holding them helpless with their long feet, and inserting their short but pointed proboscis into their chest, they drop with them to the lower part of the stem of a plant and sucking a little while, let their

victims fall to catch another. Bee-keepers should be awake, as there is no doubt, but this insect retards the progress of hives more than anything else. The flies are from $\frac{1}{4}$ to $\frac{1}{2}$ inches long, with a long pointed abdomen, marked with light colored wings. Wings transparent, color from yellow to brown. Feet long, strong and hairy. Proboscis (the sucking apparatus) strong, short and pointed. I give this rough description to enable every bee-keeper to recognize them quick. They fly with a short deep "hum" almost like a bee's hum, only shorter and deeper in tone.

Bee-keepers should report on this Insect.
Sigel, Ill. CHAS. SOME.

For the American Bee Journal. Some New Thing.

This has been an unusual summer for swarming. Notwithstanding I commenced early dividing them. When the swarming season came on, they went into swarming in real earnest. At first I accommodated them with new homes, and gave each swarm a frame filled with brood. All went on well but still they continued to swarm. I then came to the conclusion, as the basswood harvest was just approaching, there must be something done to keep them together, or lose our favorite supply of surplus honey; so I commenced cutting out the queen cells from the parent hives, but almost invariably failed in keeping them together. The following day, out they would come and continued day after day to come out. Finally I concluded to try an experiment something entirely new to me, but perhaps not new to our old experienced bee-keepers. As they refused to accept their old homes, I put them in an empty hive, setting them a proper distance from their first location, then proceeded to take out the frames with adhering bees; examining closely I removed all the queen cells, adding them to the new swarms, I had no more trouble with them coming out. Instead of putting the new with the old, I put the old with the new, having tried the above experiment on some 8 or 10, I consider it a success.

The early part of the honey season was poor, the white clover proved a failure. Up

to the beginning of basswood bloom they scarcely gathered honey enough to supply the young bees. There was an unusual crop of basswood bloom, which began to open about the 1st of July and lasted until the 15th. During that time the little fellows put in full time. I never knew bees to store up such an amount of honey in as short space of time. The hives now are filled to their utmost capacity, with the exception of the comb occupied with brood, leaving no place for the queens to propagate their eggs. I have thrown the honey out of 16 frames, which amounted to 65 pounds, sold in the city of Adrian at 18 cents per lb. I shall use the extractor sparingly, in order to keep them working in the boxes as much as possible. I have now 59 colonies. I calculate I could extract 1500 pounds at this time. I use the Barker & Dicer improved hives with sectional honey boxes. These boxes will stand at par with any I ever used. They can be safely shipped to any part without sustaining the least injury; the retailer can separate each section without injuring the honey, by cutting the paper at each division of the section; each section contains from 2½ to 3 lbs. and when placed upon the table it cannot fail to please the eye as well as the taste.

SAMUEL PORTER.

Lenawee Co., Mich.

For the American Bee Journal.

The Sale of Honey.

MR. EDITOR:—The burden upon my mind at the present time is, the great disparity between the price obtained by our honey-producing fraternity for their product and the price paid by the consumer. Large honey houses in Chicago (for instance) buy up the honey in bulk at 16 cents per lb. for extracted and 25 to 30 cents for comb. Here it is put up in appropriate packages and shipped away again to wholesale dealers in other towns, who in turn distribute to smaller wholesale dealers and retailers. I presume there are none of these middle men handling honey for fun, but each one must make his profit, and the consumer pays from 30 to 40 cents per lb for extracted and, from 40 to 50 cents for comb. Now the question arises, is it necessary for the producer to pay so many shipping bills. I have not found it so in my experience. I put my honey up in attractive style for retailing and deliver it direct to retail dealers who sell it for me and retain 10 per cent of sales for their service. I use the square honey-jar made for the purpose. The smallest packages sell most readily.

My honey has netted over 30 cents per lb for extracted and 40 cents for comb for the last four years.

Cheviot, O.

M. NEVINS.

For the American Bee Journal. Report of my Apiary.

EDITOR BEE JOURNAL:—I congratulate you upon the consolidation of the two great Bee periodicals of America. "Long may it wave," is the worst wish I have for it. I cannot get along without it.

We are having a good honey season here; the best we have had since I have kept bees, (which has only been about 4 years) but I am not going to derive much benefit from it, for I have neglected my bees shamefully all summer. I extracted over 300 lbs. on July 21st from 8 colonies of black bees most of whom had cast 2 or 3 natural swarms. I have now 19 colonies, which will all be in condition for winter before the end of this month, if all goes well with them. I put 12 colonies in a clamp last fall and succeeded in wintering them all through, but lost two in "springing," and two others were so near gone they will have to be helped in order to make them fit for winter; so that I had 8 medium stocks to commence with. I shall try to do better next year.

Nelson, Pa.

JOHN ATKINSON.

For the American Bee Journal.

New Method of Wintering.

DEAR EDITOR:—I noticed in your July number remarks upon a new method of wintering bees, by Mr. Bidwell, given to the Michigan Bee-Keepers' Convention, I believe. The manner of wintering is not given, and that is what calls me out to write this article. If Mr. Bidwell has a plan for the safe wintering of bees, he is entitled to as much honor as Langstroth has enjoyed, in giving to the public the moveable frame.

There is nothing so puzzles the bee-keeper as the successful wintering of his bees, seventy-five per cent. of the losses arising from the want of that knowledge. Any man that can show the bee-keeping fraternity a safe method of doing so, is a public benefactor, and should not hide the knowledge of the same from us. I do not charge that Mr. B. desires or is doing such a thing; nor do I expect the information gratis, if Mr. Bidwell does not wish to give bee-keepers the same. I would like to know his address, that I might buy the right. One of these two things Mr. B. should do: Either to give the public, through your journal, his mode of wintering, in season for a trial the coming winter, or let us know, through your columns, what will be the price of it. I will be willing to pay liberally for it. If this catches Mr. B.'s eye, I hope he will allow me to know his address, or that you will furnish it if you can, that I may correspond with him. If he or you will do so, I shall be

more than grateful. It seemed to be no secret to many present at the convention, and you could not find the subject that would be more valuable to your subscribers than to get Mr. Bidwell to give through the columns of the AMERICAN BEE JOURNAL his mode of wintering bees. Please give this more than a passing notice, and oblige,

C. D. HIBBARD.

Chips.

MR. EDITOR:—"Tis hot; it's more 'n hot! While the hayseeders are doing their stacking and roasting, and while my bees are pumping the buckwheat and sap blossoms dry, I'm sitting in the coolest part of the house, and enjoying and admiring the industry of Nature's creatures. How grand it is to contemplate how everything is subject to our will! We are the cap-stone of all creatures—all are beneath us! The faithful horse does our drudgery; the cow gives us nourishment, and when her milk ceases to flow in sufficient quantities, she bows her head for the fatal blow, after which we consume her very hide and hair! The tireless bee furnishes us with that sweet luxury with which we are so well acquainted. And the Granger, in his meekness, provides us with the topping-out variety. Oh, how everything is adapted to our wants! especially if we have lots of the "filthy lucre" to get what we want; which I haven't.

While in this cheery mood, I would like to run over the pages of the "Old Reliable" and stick in a few words right and left; and as Bro. Gallup likes to hear the opinion of baby bee-keepers or novices, this is written for his especial benefit.

CAN BEES EAT FRUIT?

It is often asserted by some of the best apiarists that bees cannot cut the skin of grapes, &c. Now, if they can gnaw the edge off of wood, and eat large holes through building paper, and cut through strong cotton cloth, and all this I have seen them do. Why can they not as well cut the skin of fruit, if they wish? But the trouble is, I don't believe they have a mind to; they want direct access to the juice. They will suck corn-stalks, mellons—in short, everything that is sweet; but they will not *dig* for it.

CAN OLD BEES BUILD COMB AND NURSE BROOD?

In the AMERICAN BEE JOURNAL "Adair" says old bees won't build comb or nurse brood. I don't know about the brood, but I've seen them build comb. I saw a hand-full of bees last week (Aug. 5.) that came through the winter queenless, and they had a piece of comb built as large as my hand.

WHAT KILLED THE BEES?

Mr. Gallup, as I expected, attributes my

loss of bees to the extractor. Perhaps he is right; but then one of my neighbors lost as many—all he had—and had never seen an extractor; didn't know one from a saw-mill; he kept his bees in a similar winter quarter as mine. To me, now, it would have been a wonder had they *lived*; it was as cold where I had them as it was out of doors, and occasionally warming them up did the work of destruction completely!

MODEL BEE MANAGEMENT.

I think it cannot be long since that "H. R.," with my "Management of Bees," ever saw the first bee journal, for it *does* seem if he had, he would not mention his hives stuck up on posts, and these wound about with cotton to keep off the ants—perhaps a balloon attached to each hive to suspend it in mid air, would be quite an improvement on his plan. We don't intend to secure a patent on this, so that that progressive(?) bee-keeper may use it if he likes. He still keeps box-hives and considers natural swarming best. Well, no wonder his article reads as if it had been written twenty-five years ago. Forty to fifty dollars' worth of honey from a *single stand*! Well, that explains the value of *his* management. Why, I could get that, if my bees were in the carcass of a lion, as we read about, provided they followed the ribs in comb-building, and these same ribs were arranged to take out, so I could swarm artificially—but read the article and learn!

DO ANTS ROB THE BEES?

Mr. Arga says: "Ants don't steal honey out of the hives." Now, that's strange; for they will steal it wherever else they can get it, and I have an opinion that they make no scruples stealing it from those that give them shelter and warmth.

WILL HONEY CRYSTALLIZE IN THE DARK.

On page 178 there are a few words, written by I don't know who, to the effect that it will not. Wonder how the "tarnal light" goes into cellars and inside of a honey-tight cask; for with me it will crystallize in this condition. But perhaps it wasn't dark enough; so I would advise bee-keepers when they think they have their honey in a sufficiently dark place to keep it from crystallizing, to make it a *little darker*!

A GREAT DISCOVERY!!!

Mrs. Tupper says: "Salt thrown into water will keep it sweet." If so, why not feed our bees with salt water, instead of sugar-syrups? But hold on, "Novice"—or any other man! I made the discovery, although Mrs. T. may have spoken of it; but I made the application above mentioned—so keep your hands off. To make sugar, all we have to do is to sweeten water with salt, boil it down, and you will get as nice

a sugar as you ever saw; for salt is so clear and white, you know. When this discovery is generally known, salt will be worth something.

HOW DO YOU LIKE IT?

How do you like to hold up a frame for inspection, with a bunch of black bees dangling on the bottom, so you can't set it down without crushing about fifty; how do you like to have a bee come at this critical moment and plant you one between the fingers? I don't appreciate this sacrifice of the "busy bee!" If I had been brought up in a Christian community, under these circumstances, I think I would swear.

Mr. Editor, there is no use trying to white-wash these honey-merchants; you can't get around their actions, "no how." Say Perrine *did* do the fair thing with some; he even paid two of my neighbors 5 per cent. interest on the money not sent on time, but that don't help my case in the least. I think I and Mr. Bird had better light our lanterns, and, like Diogenes, hunt for an honest honey-merchant.

Yours, J. D. KRUSCHKE.

Berlin, Wis., Aug. 18.

For the American Bee Journal.

Scraps.

The old "AMERICAN BEE JOURNAL" since it lost its founder and head, the late Samuel Wagner, has been moving around considerably, though it has been in good and faithful hands. And now as it has "gobbled up" another journal we can say good bye to the "NATIONAL," but we hav'n't lost it, though it has married and changed its name. *I like the change first rate and wish success to the new order of things.*

Friend Argo says his chickens will pick worms off the bottom board and not touch any bees. I think ours can beat that, for besides getting what few moths there are, they will go up to a cluster of bees and pick out the flies and drones by the half-hour, and I never saw but one take a worker and he dropped it and looked as though he had made a mistake and was sorry for it. How will that compare with king birds?

To the advice to "keep bees" I would add keep *chickens*, set your hives up from the ground and snap your fingers at moths. Friend Hester says: "I have had no experience with these large single story hives," and, "I should think it would also be quite difficult to contract the space within them to suit a small stock, or to winter even a full stock." We use the Langstroth frame, Adair size, 16 and 20 frames to the hive, and find them to work well. We had but one strong stock in the spring, a 20 frame hive. Made one new stock, bought

5 light ones, and built them all up mostly from the big stocks, and have extracted 34 lbs. of honey besides. The hive has always been full of brood, at least 16 out of the 20 frames, and is now very strong, enough bees and brood for two good swarms.

As to using them for light stocks, that is easy enough; just put in a division board, or two of them, and give them room as fast as they require it. I transferred a light stock from box hive to 16 frame hive; could get but five frames of comb out of it for them; put in the division board and now they are a good strong swarm.

In wintering you can put the swarm in the centre of the hive, with a board or wire division on each side and pack the two ends with clean straw, or shavings which will absorb the moisture and keep the bees dry and warm.

In the old directions for transferring it was always stated to put the brood the same side up as in the old hive. All of us "Novices" thought it was all law and gospel and so took special pains to do it.

We have a glass fish tank and the bees gather around it by hundreds to get the dripping water. While looking at the fish we noticed one bee who didn't seem to care about the ills of life, for she had a big hole stove in on one side as large as a pin head, the scale sticking out at right angles. The said bee came after a load of water 4 or 5 times in an hour, and we noticed her for several days. How is that for perseverance under difficulties?

A writer in the National some time ago, said in regard to the qualities of Black and Italian drones: "Don't be afraid of black drones, but let them fly if any should be out at this time. Your Italian drones know what is up. You will then have an opportunity to test the superiority of Italian drones over black ones. You will also notice that if there are any black queens flying at this time in your neighborhood, there will be a majority of them fertilized by Italian drones."

Your Italian drones know what is up! Yes, they do, "in a horn." I made three new stocks for a friend, and one of his old stocks raised a new queen. They had hundreds of Italian drones, eleven swarms in all. About a fourth of a mile from them are four of the insignificant black stocks, while in different parts of the town are about 40 stocks of Italians, and no other blacks within a mile. Three out of the four new queens *mated with black drones*, and one or two others that I know of. One of the black stock swarmed, and the new queen in the old hive mated with a black drone;—four black stocks against over 40 Italians. Superior fiddlesticks!

Oneida, I. I.

W. M. KELLOGG.

For the American Bee Journal.
Wintering Bees.

On the 31st of October last year, I put in my cellar, 12 stands of bees; and before the 15th of November 120 stands. The cellar is 16x24, and dry. I took from 50 stands from one to five frames each. So ten or twelve swarms had only 3 frames left. The 50 hives had three to seven frames in each. All are 8 frame hives. I took them from the cellar March 17 and 18th, and of the 120 hives but two swarms were dead. I afterward lost 6 more, by being queenless. My bees were never in better condition than last spring. I saw little difference between those from which I took the frames and, those I did not. I would not recommend the removal of more than two frames, and think that beneficial.

When swarming began, I had 98 swarms, which I increased by natural and artificial swarming to 175. I lost several swarms which went to the woods. Swarming closed July 1st. I took with the extractor 6,000 pounds of honey in two weeks, all of which was linden or basswood. Have on hand 8,000 lbs. The crop was cut short by not less than 10,000 lbs.

Of all honey plants I have tried, the Meliott Clover is the best. The drouth does not affect its product of honey. I shall have ten acres in bloom next year. Seven years experience teaches me that it pays to have plenty of artificial pasture.

My lowest average hive, was 40 lbs. per hive old and young, the highest 80 lbs. I think the proper average should be 50 to 75 lbs. each.

My bees wintered so well in the cellar, I have enlarged the cellar to 24x58. and 7 feet high, and shall try it again.

R. MILLER.

Campton, Lee Co., Ill.

For the American Bee Journal.
My Report.

We are having an uncommon good run of basswood honey this season. In fact honey has been too plenty for those not having extractors. I have been moving about with mine pretty lively for the past week, and the experience I have had among my neighbors I think would convince the most skeptical of the usefulness of the extractor, as I have found stock after stock without an egg or young grub in the hive and every cell full of honey, except a very little capped brood. I would like to ask some of those who do not believe there is any use in the extractor, what they would do in that case without it? It is no use to give them empty frames, for as fast as a cell is built and sufficiently lengthened out to contain a drop of honey it is filled, and some

hives that I nearly emptied last Saturday (five days ago) were filled again so quick that the queen did not get in a patch of eggs as big as my hand. So much for Michigan. Now a word for the moth.

My advice to those that raise such a "hue and cry" about the moth, is to get a mechanic to make their hives. I do not mean a man that has jack-plane and scratch awl and calls himself a joiner, but a man that can and will fit two pieces of board together so that the worms cannot build a nest between them. Then let your stocks be either strong or weak and you will have no trouble with worms. I have thirteen stocks of bees and I do not think I have found to exceed three or four moth worms about the hives this season, and only one inside the hive at that. The only secret there is in it is this: I make my hives so that there is no crack or crevice in them where a worm can hide, and the bees keep them out. Now all you unbelievers come and see for yourselves. But perhaps you will think as the negro told the Irishman when he asked what made him so black: "T's the climate." Not so, my friends, for my neighbors have the same climate that I have and some of them have plenty of moth-worms in their hives. They buy cheap hives.

I very often see advertisements of patent hives with moth-trap attachments, etc. Please let me give my experience with a Buckeye hive; moth trap and all. Last month in the natural course of events there fell into my hands a stock of bees in a Buckeye hive, and also an empty hive of the same sort. Two or three days after I got them home they swarmed, and not having anything else handy, I hived them in the empty Buckeye hive (after inserting a couple of cards of comb from the other hive); and to save speculation I might as well remark that I saw the queen safely on a card of comb, and then closed the hive. They appeared to go to work all right but in about 8 or 10 days they swarmed out. I opened the hive and found they had made but very little comb, and that all drone comb. There was not an egg in the hive—pretty good evidence that they had raised a young queen. Now the question was what had become of the old queen. Time will show. I cut out the queen-cells and hived them back again and the first spare time I had I made a hive and transferred them, when I found that the young queen and the swarm were in the body of the hive, while the old queen and a little handful of bees were down in the moth trap!

That was the reason they raised a young queen and swarmed out, by my not expecting any such thing and cutting the queen cells out.

If the traps will not catch Millers, they will sometimes catch queens, so buy one by all means of the first pedlar that comes along.

H. P. GALLUP.

Medina, Mich.

For the American Bee Journal.

How One Man Got Rid of his Drones.

MRS. TUPPER:—Your valuable favor of the 8th inst., to hand. The bees reached their home on the evening of the 23rd, in apparent good condition. The next day I noticed some dead ones at the entrance, which I removed frequently during the day with a small wire. Prompted by curiosity and with the hope of relieving the labor of the bees in bringing their dead to the door, I opened the hive in the evening, lifted all the frames out, brushed out and gave the box a good cleansing, returned the frames and bees without offending a single bee so far as I knew. I think about half the colony were dead—say one pint.

From book information, I concluded there was a surplus of drones in the colony. How to get rid of them was the question. Drone catchers were patented and what could I do. The laborers were working finely but the surplus of gentlemen of elegant leisure was annoying. With a small bit of paste-board, with a notch one-eighth by three inches long placed over the entrance, settled the question speedily. The laborers could enter but the drones could not. A little squeeze on the head settled the business for them, and to all appearances the colony is doing well. Several of my neighbors want bees and the JOURNAL, but are a little demoralized by the delay of our railroad up the Platte, and think they must wait another year.

D. HAUSBAUGH.

South Platte, Colorado.

For the American Bee Journal.

Wintering Observations.

It has been some time since I have felt like writing to the BEE JOURNAL but now that my bees have done well, I am encouraged to take up the pen again and give my experience and observations that they may possibly be of benefit to brother bee-keepers. Trusting that the wintering question will receive the fullest discussion before another winter comes down upon us with its uncertainties and disastrous results.

I put twenty-six swarms in the cellar November 21st, all except two supplied with natural stores, and nearly all strong swarms. Now, as Mr. Quinby, on page 106, desires to compare notes in relation to temperature, here are a few facts gleaned from personal observation. The portion

of the cellar in which the bees were stored was near an outside door, and though banked with straw, during our severest cold the temperature fell two degrees below the freezing point. A few days after, the temperature arose to 40°, and two swarms, one of them upon which all early honey had been extracted leaving fall honey exclusively, showed signs of dysentery. The latter swarm was very large and vigorous, occupying a three-foot hive with Adair size of frame. We had several of these cold snaps and every time the temperature arose dysentery was developed more and more virulent in the large swarms. Until being set upon their summer stand the remainder smeared their combs and themselves in a fearful manner and froze up solid. Now, was it the honey or the cold, or a little of both that accomplished the ruin of this swarm? All of the rest wintered well whether fed on syrup or natural stores.

On the 19th of March they were set upon their summer stands. A careful examination showed no sealed broods except in a very few hives. The queens had apparently just commenced to lay. In two days after setting them out the weather changed and a cold spell intervened. Upon the next warm day an examination showed no sealed brood but the queens had just commenced to lay, the first eggs of the ten days previous being destroyed. Three times we made these examinations through the months of March and April with like results, no brood rearing and all the while a constant diminution of old bees, and eventually the swarming out fever left me, by the middle of May, with only six swarms out of twenty-six, and only two of these were strong. These had sealed brood when set upon their summer stands.

With the temperature of the cellar at 40° or 45° the bees were very quiet—about 45° would be my "standard."

During the past winter bees wintered upon their summer stands and were in better condition than those that were housed. I have also observed that during the past three severe winters, bees wintered in a neighboring village where the hives were entirely surrounded by buildings, and came through in the very best condition.

Now having lost heavily and observed closely, let us see if there was not a remedy, if it had been applied in time. Fine food and an even temperature of 45° would have banished dysentery. They would not have dwindled down in the spring if each swarm had been examined and not set out until each had capped brood. This could have been obtained by feeding syrup and supplying pollen. And here let me suggest the experiment of feeding rye meal late in the fall. Will bees work upon it at that time? If they would, a supply might be

stored and reserved until spring.

While extracting we often observe that cells of certain combs are about two-thirds filled with pollen while the other third is filled with honey and capped over. This was evidently put up for spring use. The honey being put in with it for its better preservation. We all know that pollen moulds very easily. Can we not learn something from this fact also? Several combs containing pollen could be preserved in honey. And we want to know what would give the queen the laying fever in the spring more readily than the insertion of a frame of pollen dripping with honey.

We trust these facts will receive due attention during the coming fall.

"SCIENTIFIC."

For the American Bee Journal. Chips from Sweet Home.

DEAR EDITOR:—Ten years ago we became interested in bees by taking orders for the Thomas Hive. We handled bees some for six years and four years ago Palmer Bro's made a special business of them for two years, then we dissolved partnership and I bought *Sweet Home*. In the winter of '72 and '73 I lost all (54 hives) the bees I had. Of some 700 or 800 hives between New Boston and Muscatine (20 miles) only about 15 or 20 were alive in the spring, and last winter took the most of them to parts unknown. In the spring of '73 two neighbors and I bought 96 hives in Kentucky, I shipped them 80 miles by rail and about 600 miles by boat. I increased my share (40) to 95 hives, this spring had 35 living. I now have (July 10,) 67 hives, am running them for extracted and box honey. I use Longstroth and Thomas Hives, am 29 years old, weigh 140 lbs., have a library of books and geological specimens, have an observing hive in the parlor, the bees pass out and in through the wall, all the workings of the once mysterious hive can be seen by lamp-light or sun; it consists of one comb and glass on each side. Our apiary is shaded by a natural grove. Our Sweet Home Honey Slinger consists of a stationary tub with handles and a faucet at the side or the bottom, and a revolving frame which is run by fanning mill gearing, it is much better than a revolvable can. We carry our combs to and from the hives in a rectangular frame supported by four legs which are long enough to keep the frames from the ground; the frame is carried in front of the peason by grasping the two end pieces; the combs are so placed in the frames that the ends are to and from us. If robbers are plenty we jar it as we enter the honey-room, and if a few follow us in they fly to the windows, which are made *revolvable*, so that a *flip* puts them outside.

HOW WE SAVE COMBS FROM THE MOTH.

The *we* just mentioned consists of myself and a blue-eyed boy of 21 months old, we two complete the family of Sweet Home. We have had a great amount of good comb destroyed by moths. We tried limestone, and last season we hung them on poles in the shade; the wind blew them down, damaging them, but now we have them *safe* at last in our cellar, which is 20x24 feet, having a chimney in the center with a draft-hole at the base which is continually drawing the damp bottom air out; also 2 windows on each side covered now with fine wire-cloth. Last spring we put our combs (enough for a hundred hives) in there, soon we found the moth eggs hatching, it being cold in the cellar the worms nestled closely together and we readily fed them to our poultry; but some few were overlooked and are coming out winged moths and are seen to fly to the windows where I am certain to put my fingers on them. My bee-shirts I have made as others except buttons a little closer on the bosom and elastic in the waist-bands.

While on a visit to Dadant & Son., of Hamilton, Ill., I became very much in favor of using the black-board instead of a book as I had formerly been doing; but seeing C. P. Dadant use a *slate* pencil, I thought why could not slates be used instead of boards, I accordingly procured a few school slates from which I took the frames and cut them in pieces of 2½x3 inches boring a hole in the middle of one end and hung them on nails, these slates cost me a little over a cent apiece and the cutting is readily done by any sharp instrument and a straight-edge. They are cheap, durable, writing-lasting, and always just where we want them.

Mercer Co., Ill.

D. D. PALMER.

For the American Bee Journal. My Experience.

I have just noticed Mr. C. Hester's "Random Notes" in the June number of the NATIONAL BEE JOURNAL, as we live only eight miles apart, I will give you my mode of operating with my bees last winter, my success this season &c., &c. I have no cellar to winter in, consequently I winter as you may say out of doors, it's true I have them under a shed, and protected from the north and west winds. I went into winter quarters last winter with 14 colonies, at the time I put them up, there was not one pound of honey in the 14 stocks. I fed them sugar syrup, made precisely as Judge Hester did his and fed them in like manner, by pouring in the empty combs, but I fed mine at intervals through the winter, that is on warm days. I came through the winter with 10 stocks losing four, which I

am confident starved, not giving them syrup sufficient. My stocks came through in a very weak condition, the spring being very cold and backward they did not get to breeding until late, but after the weather did begin to get warm, their increase was more rapid than I ever experienced before. Seven of the ten is all I have extracted any honey from during the season, that being so nearly gone, it was all they could do to keep or get up the strength of the colony to make one divide from. I use the double Langstroth hive, and from the upper stories of the seven stocks I have extracted four hundred and fifty lbs. of honey this season, the lower stories contain sufficient honey to winter them through. I have divided to eighteen this season. I will try wintering on their own honey and if I do not have success hereafter I will try Judge Hester's plan, extract all and feed syrup. I must state how I saved one of my pet stocks after I placed them on summer stand. I went out one warm morning about the 20th of April, I noticed the bees just able to crawl from the front entrance of the hive. I immediately opened the house and found the bees on the cards just able to move and the queen on the bottom of the hive as I thought dead. I immediately got some syrup and on examining closely, found my queen with some life yet. I placed some syrup to her and she eat it. I sprinkled syrup over the mass of bees on the cards lightly. I then filled all the empty cards with the same, and in one hour I examined again, found them quite lively, during the day they removed the syrup from the outer cards to the center and this summer that stock has made one divide and furnished me over 50 lbs. of honey; in one half-hour longer the stock would have been gone. The reason of their consuming the syrup so fast was they were breeding rapidly.

JAS. R. WILCOX.

For the American Bee Journal.
Bee Notes.

There seems to be a perfect dearth of honey; no flowers, no honey-dew; nothing but pollen from corn tassels, and, whatever it is, that bees get from fruit. Hives that contained honey a month ago, now have almost none. But for the cotton blossom now unfolding, bees would have to be fed, something the fogies never think of. Bees are doing nothing in boxes, and on inquiry find it to be a general thing; a state of idle inactivity seems to reign throughout the neighboring apiaries. A good patch of Buckwheat and Alsike clover have been very much needed this year, and it behooves apiarians to see to it that the same state of affairs is not repeated next year. The golden bands might succeed in finding

honey, but our black bees have well nigh given up the game. For one, I am anxious to see an accurate drawing and description of *your* hive, and am *now* anxious to know whether or not a different style and *size* of hive (than the one you use) is best for our long and hot summers and short winters. Dr. I. P. H. B., of Augusta, Ga., could give valuable information on this subject. Can't he be induced to give an article for this paper on "The proper size of Hives for the South." I hope so.

S. C.

EDGEFIELD.

J. P. Moore, Binghampton, N. Y., says: I commenced the season of 1873 with seventeen stocks of bees, having lost four in the spring, and sold one. Ten were in fair condition by May 20; the other seven were much reduced, but by taking brood from strong ones, I was able to build up five of the weak ones by the time honey commenced to yield. The other two I run for increase or surplus queens, and was able by breeding and using my four hives of empty combs, to increase the two to eight full stocks and five half stocks or nuclei. Two of the nuclei died in the winter, and the other three are very weak, (I prefer full stocks for winter), and raised ten surplus queens. The fifteen that the boxes were put on were run entirely for box honey, without increase, as we have things so arranged now that when we have got a hive filled with brood in time to put on boxes, we can have them put all their surplus in boxes, if the queen is prolific, without the trouble of handling the brood.

Hints from Bee-Keepers.

If several days of rainy weather should succeed a warm coming off, they may die of famine, if timely relief of honey is not given them.—*Wildman*.

Queens are not equally fruitful. While some breed slowly or not at all, others will speedily increase in prodigious numbers.—*Keys*.

No true lover of bees, I am persuaded, ever lighted the fatal match that was to destroy his little innocents with livid flames and a smoke that strikes them dead with its intolerable stench, without much concern and uneasiness.—*White*.

It is commonly the practice to rub the sides of the hive with aromatic herbs, or a solution of salt, or other substance. But the most experienced bee-master deems this altogether unnecessary, as it can be attended with no advantage whatever.—*Hacher*.

Always have the cheerful rays of the morning sun fall upon your hives; but contrive to throw a shade upon their front for a few hours in the middle of the day,

when the weather is very hot. Such a shade will be grateful to your bees.—*Nutt.*

Bees express no more love for their keepers than for strangers, but they (the keepers) being used to them, with greater confidence venture among them, while some (more fearful) beholding, fancy that the bees respect and love them more than strangers.—*Purchase.*

Workers alone have the property of secreting wax. Scales of it ranged in pairs are contained in minute receptacles under the lower segments of the abdomen. * * This substance is produced by a particular organ, after the manner of other secretions.—*Huber.*

When Bee-Keeping don't Pay— What then?

Hogs have been sold for less than value of corn fed in fattening. Cattle brought less than cost of raising. Poultry could be had for less than value of food fed them. Yet all required as much care as if sold at a profit. We would, however, think that farmer very unwise who would quit the raising of live stock or grain, because of low prices or severe winters. If the bee-keeping farmers would use as much precaution in preparing pasturage and shelter for their bees as they do for other live stock, I doubt not that a few years of experience, backed with a comparative table of facts and figures, would convince them that bee-keeping would prove as remunerative as any business in which they are engaged.

The man who expects a large crop of fine fruit each year, without pruning or cultivating his orchard; he who hopes to harvest a heavy crop of wheat, corn, or oats, without properly plowing or pulverizing the soil; he who expects to cut a heavy swath of hay, every year, from a meadow he devotes half a year to pasturage; and the bee-keeper who expects to get a large yield of honey without giving his bees any attention whatever—are all sure to be disappointed with their business, and will declare it don't pay.—*Ex.*

For the American Bee Journal.

Successful Bee-Keeping.

I came through the winter with all my colonies, 36 in number, most of which were in good condition. The spring opened favorably and my expectations were great, but about the 1st of April the rain set in, and I think my bees only worked two days during the whole month. I fed them occasionally, but nearly every queen ceased laying and all the hives killed their drones.

The rain ceased the 1st of May, and the poplar commenced blooming at the same time, but alas! my bees were not strong enough to bring in honey as I wished them to, but to make the best of what could not be helped I commenced doubling up, putting two and sometimes three colonies together and so reduced my colonies to 22, leaving the queens and what bees adhered to one comb in the old hive with a division board on each side. These I would give room as they increased, and have made strong colonies of them all.

From the poplar I took 1632 lbs. of extracted honey which I thought doing pretty well, but when the sourwood bloomed the bees exceeded my highest expectations. From the sourwood I have taken 2004½ lbs. which makes a total of 3636½ lbs. and have increased my bees to 69 colonies all in good condition with honey enough to spare at least 500 lbs. which I will take as soon as the buckwheat commences to bloom. The sourwood makes the prettiest honey I ever saw; when poured on the whitest letter paper, you can see no difference in the color of the paper and the honey.

I think this a splendid place for bees. I have lived here a little more than two years and am highly pleased, and right here I would say to any of our northern bee-keeping friends who think of emigrating, that I don't think they could find a place more suitable. The woods are thick with poplar and sourwood besides other blooms in abundance. The water which is pure freestone cannot be exceeded anywhere. The air is pure and consequently healthy and society as good as could be desired. Lands are cheap ranging from 5 to 15 dollars per acre. We have in our midst a great many families who have moved here from the northern States, all of whom are well pleased. These families are all United Presbyterians, have built a large and commodious house for worship, have regular preaching and Sabbath school.

We have other churches near by, Methodists, Missionary Baptists and Baptists, and within a few hours ride, Cumberland and other branches of Presbyterian churches. We have built and furnished a large two-story academy, which is now under Prof. John A. Ramsey of the Indiana State University as principal. Tuition has been put down to the lowest figures and no person could find a better place to educate their children.

Any one desiring to learn more of our country can do so by addressing, Rev. J. W. Wait, Prof. J. A. Ramsey, or your humble servant, J. F. MONTGOMERY.

Lincoln, Lincoln Co., Tenn.

For the American Bee Journal.

Where the Linden grows.

DEAR JOURNAL: One of your correspondents (R.H. M. I think), wishes to know now far south the Linden grows. I am on the high ridge of land or "divide" between the head-waters of the Guadalupe and the Piedronalis, about two thousand feet above the Gulf, in lat. 30 deg.; and a dwarf or mountain linden grows on all the creeks that flow from the "divide" into these two rivers. It has never been seen any lower down than this, that I know of. I sent to Michigan last March for 50 linden cuttings and set them out in San Antonia (lat. 29, 30 deg., and 750 ft. above the Gulf) and they all perished though I mulched them and kept them well watered. I think the season was too far advanced and intend trying some more this fall. The "divide" is a fine range for bees. I have known one person to have as many as 7 trees at one time, standing in the forest, which he had found by coursing wild bees from water, and I obtained my dozen swarms to start with this spring for nothing.

Texas.

S. J. NEWCOMB.

For the American Bee Journal.

Success in Wintering. Is it Attainable?

Probably no other topic in connection with apiculture has of late been the subject of such extensive experiment and thorough investigation, as the one which heads our article. In view of the heavy losses which have been sustained by American apiarians during the past three years, the interrogation—Is success attainable?—has become one of no small significance. We believe it requires no argument to convince any candid mind, that the cause of apiculture in our country must materially suffer, unless some method shall be devised that will insure more uniform success in "Winter Bee-Keeping" than has been attained during the past few years. 'Tis true that we do not lack for theory to account for these losses in wintering, and demonstrate how the way henceforth be avoided. But the simple fact that many apiaries have again been decimated by that fell destroyer, designated as the "bee disease," is sufficient evidence that there is yet abundant need of further investigation.

Sugar syrup which was announced with such a flourish of trumpets, as being the panacea, *per se*, for all our troubles, has been tried and found wanting. A uniformly warm temperature has done better, though not a specific for the "bee disease." And so of other theories; none have proved universally successful.

Please don't infer from the above, that

we intend to convey the impression that no one has succeeded. But we *do* say that in sections where the bee disease has prevailed many have failed, despite extra care and exertion to secure the conditions necessary to success.

Really then, is success—complete uniform success—attainable? We believe it is, *provided* the requisite conditions are complied with. But what *are* these conditions?

According to our best authorities, we might enumerate an abundance of wholesome food, prolific queens, young bees, empty comb in the brood nest, a uniform temperature of 40 degrees Fahrenheit, and—well, "you know the rest." But are these *all*? Let us see. Bees we are told are "natives of warm climate," where polar blasts and arctic's cold is unknown; where their joyful, busy hum is heard alike in dreary January or bright July. Notwithstanding this fact, the honey bee has vied with man himself in manifesting qualities, characteristically cosmopolitan; having with him become acclimated to many an uncongenial clime. Yet for all this, a fearful mortality has ever and anon, decimated the ranks of "bee-dom" in our more northern latitude, blasting fond hopes and depleting unfilled purses. This has no doubt often been the sequence of carelessness and ignorance, though of late the destroyer has often baffled the hand of skill and science. But must these scenes of desolation be witnessed with the return of each succeeding winter? Is there no "safe retreat" by which success may be attained? Or, are the *conditions* necessary to success unattainable?

After devoting much time and thought to the investigation of this problem, we arrived at this conclusion, regarding its solution: *complete success is to be attained only by approximating the conditions which surround the bee in its native clime.* This involves a point which seems to have hitherto escaped the discriminating discernment and analytical acumen which has characterized the modern Yankee investigator; supply natural conditions and success is yours. But this is impossible. How are we to arrange our bees so that they may fly in December, January, and February where the mercury will persist in neighboring with Zero? Away with your vain tantalizing theories, 'tis impossible.

Be patient dear reader and we'll explain. We, too, thought 'twas impossible, but were mistaken; and here's how we ascertained the fact.

A friend, by name of H. (we withhold his real name and address, to save him the annoyance of "a thousand and one" interrogations) thought if he could manage to give his bees an occasional "airing" during

the season of frost and snow, it would do 'em good. (By the way, no abler or more successful investigator ever graced the ranks of those engaged in apicultural or pomological science in this or any other country, than this same H.) Thinking and acting are synonymous terms with him, in matters that engross his attention. So on a clear frosty morning in December, he placed three colonies of bees in a "hot-bed," as an experiment. Presently the genial rays of old Sol raised the temperature of the interior so that a few bees came to the entrance of the hives to reconnoiter. "Surely" says the advance guard, "spring is here again; let's have a play-spell and enjoy the bright, warm sunshine." So saying they took wing and commenced buzzing around in good earnest. They were soon followed by their napping comrades (?) and in a few moments longer the "voiding room" was a scene of wonderful activity. In less than fifty minutes from the time they commenced to fly all was quiet again, the bees had had a good purifying flight, and strangest of all, scarcely a dead bee could be found to indicate the "lapse of time." This experiment, so auspicious in inception and satisfactory in results, was followed by others on a larger scale, including about 75 colonies in all. As a result, our friend says that hereafter, his bees will go into a hot-bed in November. He thinks that every colony in fair condition in October can be brought through so as to be in just as good, or even better condition, the following May. He is naturally quite enthusiastic over the success of his experiments and well he may be, for in our humble opinion, it is one of the discoveries of this age of invention, one that will mark a new era in *successful* bee-culture. For, despite cold, snow, and wind, we can give our bees an opportunity to fly almost any day in the winter and spring season, when the sun shines, which makes our success in wintering doubly sure.

But we're getting verbose again—a common fault of ours when deeply interested in any subject—and must close. At some future time we will give the details of management necessary to insure success with this method of wintering; also its effect upon early brood rearing, and other topics connected therewith.

S. Haven, Mich. HERBERT A. BURCH.

P. S. Please *don't* write us, making enquiries relation to bees or bee-culture. Our time is too fully occupied to answer such letters even at "one dollar each." If you wish our opinion upon any given point send your enquiries to the AMERICAN BEE JOURNAL for publication, and we'll cheerfully answer them to the full extent of our ability. Please *do try* and bear this in mind.

H. A. B.

For the American Bee Journal. Southern Bee Notes.

MRS. TUPPER :—I have just received and perused the June No. of the "NATIONAL" with interest. It would give more satisfaction if correspondents would give their parish or country. I live on the same meridian as your correspondent "Y" of La., and although we had a poor yield of honey after the middle of April, we have not thought of feeding. We live on Vermillion river near the sea marsh, and have extensive forests on the southern border of an extensive prairie. "Y" may live east of the Mississippi and I should like to know his surroundings.

During March and early part of April we had a great flow of honey from willow, peach, plum, etc. The great rains, followed by drought, cut off the yield; but for some weeks my bees have revived, as have the crops, from bountiful rains. After two years impartial trial I find different experience from Robert J. Collinson. The Italians are much the easiest handled.—They are also much less disturbed by worms; they are more prolific and make more honey.

In reply to your correspondent R. H. M. page 145, I will state that every southerner knows basswood by the name of linn, the bark of which is often stripped by negroes for chair bottoms, horse-collars, etc. It grows freely here.

J. B. RAMSEY.

Abbeville, La.

Who will answer the following question? How to purify wax, and prevent its becoming of a dark color.

S. S. ELLIOT.

My bees have stored about 60 lbs. to the stand, so far this season. It is very dry at present.

EDGAR MCNITT.

Centre Village, O.

For the American Bee Journal. Moving Bees in Winter.

EDITOR AMERICAN BEE JOURNAL :—I am 46 miles from Milwaukee, in the best honey producing portion of Wisconsin. I moved twice between the last of October and 12th of January, 1874. I moved six hives of bees four miles to the city of Milwaukee on a wagon, then 30 miles on a freight train; then 4½ miles on a half-spring wagon over the roughest road I ever saw. The bees were placed in the cellar and 14 days after I gave them a flight. The cellar is dug into a hillside, is covered with wood and gravel, and averages 30 to 40 deg. heat. The 14th of December it was about 57 deg. on the sunny side and I took the bees out

for a flight which entirely cured the dysentery of which I had discovered symptoms. I feed them warm sugar and syrup.

On the 6th of January they were again packed for an 18-mile trip on a sleigh over a rough road, and they were again placed in a cellar. On the 11th of February, they had another flight. I lost but half of one swarm which was caused by a frame getting loose and crushing them. Who will say bees cannot be moved in winter? I would risk a swarm 200 miles on an express train, if packed so as to let the heat out at the top of the hive—not in front, for then the heat remains in the hive, and the second day the bees are sick. Flat bottom hives are useless in this cold climate—too damp. I make my own, and use no patents.

From 3 swarms bought last May, I have increased to 7, and 4 nuclei, and while basswood was in bloom I could have used the extractor every three days, but I was at home only Sundays and got but half the crop. From one second artificial swarm I took $3\frac{1}{2}$ gallons of white clover honey. Now, the swarms average 60 lbs. per hive. I have sold a few queens. I am partly satisfied with Grimm's sending pure Italians but the queens 2 out of 3 were old. I have raised 15 young queens, and will put them in place of old ones. The bees have cost me \$15 per hive on the stand. I will sell as good for \$12, in frame hives.

I have handled bees 18 years, 12 of which have used frames.

This morning I opened a nuclei to search for a queen which I knew was 9 days old. I saw a drone just letting loose from her, and before my surprise was over, two bees took hold of a small white string hanging from the abdomen of the queen. These drones were laid in the nuclei, by a fertile worker, which I killed last Sunday.

I can give many interesting facts relating to queens, but have not time now.

JOHN H. GRUNTHIER.

Therese, Dodge Co., Wis.

For the American Bee Journal.

Wintering and Springing Bees.

Winter is coming on and bee keepers in different parts of the country are beginning to feel anxious about the bees. The question of all absorbing interest at this time is how shall we winter our bees without fear of a repetition of disheartening experiences of the past three winters and springs.

Now there are half a dozen men in our immediate neighborhood who keep from 20 to 80 swarms each, and have had no loss the past four years, neither have they had any trouble with swarming out or dwindling down in spring, though the two last springs have been unusually cold, back-

ward and unfavorable. All wintered on summer stands and on natural stores and none have any fear of disease or extensive losses in the future. All these parties prepare their swarms for winter upon the same general principles, but vary somewhat in their methods. We will state these variations and give our views upon them.

One plan is to remove two frames from the hive and put a partition board on each side of the remaining frames and bees, lay a blanket over the frames (after putting some sticks across to keep the blanket up sufficiently to give the bees a passage over the frames) put the cap on and pack it full of dry leaves.

It is my opinion that strong stocks thus closely packed find themselves so comfortable and warm that they keep on the move, and consequently consume much more food than they would if they had more space, more air to keep them cooler and more dormant.

Another plan is to leave all the frames in, put blanket on as before and a straw mat over this, with a stick an inch thick across the mat at each end and place the cover on the sticks. This last plan I think is a little on the other extreme as sudden and severe changes of temperature would have too direct a bearing upon the bees, rendering them less dormant, and again consuming more food than is desirable.

My own plan is the medium, thus: put the straw mat over the frames the same as a honey board, then put the cap on and put a coffee sack or any kind of a cloth that will let the moisture from below pass through readily, on over the mat. Tack bits of leather on the edge of the cap to keep cover raised $\frac{1}{4}$ of an inch, put the cover on, and a stone on top to keep it there, and they are ready for Jack Frost or any thing that may come.

Our 33 stocks wintered in this way last winter and they certainly did not consume more than 120 lbs. of food each from the time they quit gathering in the fall till they commenced again in the spring, a period of over six months, and a large force of brood reared in the time.

The most experienced apiarians in Europe and America decide that straw is the best material to keep bees healthy in winter that has ever been used for a hive. Quinby, in his excellent *Mysteries of Beekeeping*, advises the wintering of bees in straw hives and changing them back to wooden ones in the spring. This material, being a more perfect non-conductor of heat than any other, and at the same time a good conductor of moisture serves the purpose of keeping the interior of the hive dry and sweet with the least possible expenditure of animal heat. Now by placing a well made straw mat (like the sample you have Mr. Editor) over the entire top of the

hive we secure nearly all the advantage of an entire straw hive. It is very important that all the little details in this matter of wintering should be understood and carefully observed. In conclusion I will state a little incident that came under my observation last winter, to show how a little variation (accidental or otherwise) may result in loss. And, to give a hint to some of our writers who still persist that ventilation in winter is, under all circumstances bad for the bees.

Calling on friend Muth about the middle of January I found him (as usual) very busy in the store. But when a bee-keeping friend calls, if the weather is mild, as in this case, the clerks usually have to put in extra licks enough to make his place good while the bees are looked into to see if they are rearing brood, to compare the Egyptian queen with Italian or something of the sort. We were soon on the roof and after going through five or six hives we came to one that was quite damp, the bottom board nearly covered with dead bees, and several knots of dead ones between the combs.

"I can't understand that," says Muth. "I think the cover must leak."

"No there is no leak in the cover, there are two blankets and they are stuck together."

He pulls them apart and finds on the inside of one of them a pretty nice coating of propolis which had nearly stopped the upward ventilation. The discovery was made in time, and a good swarm saved.

Cheviot, O.

M. NEVINS.

P. S. We are glad to see the JOURNAL constantly improving in interest. I don't know how any beekeeper and takes any interest in them can afford to do without it. There is not one page in all my back volumes that I have not read more than once, and still I think so much of them for reference that I would not be willing to part with them for three times their original cost.

M. N.

For the American Bee Journal.

Bees and Grapes Again.

In the autumn of 1872 I had one and one-half acres of grapes mostly of the Concord variety. I also had 24 stocks of bees and there were 160 stocks in and near our town. (By the way only ten lived through the next winter, out of the 160.) Before the Grapes were ripe the bees were working on rotten apples and sound ones also when the birds picked into them; but when the Grapes ripened the birds and tame fowls picked into a great many of them, and then, but not till then, the bees were all over them by the thousands, but not once could I find that the bees opened the grapes first—only working on those already open, and I

watched them closely. There was no honey in the flowers and the bees were everywhere, around stores, cider mills, and any place where anything sweet could be obtained, no matter how much acid was mixed in. I think this is the first cause of the great loss of bees here the next winter, as forage was so scarce that they almost entirely ceased raising brood by the 15th of September, and all that were already hatched worked nearly their time out before cold weather set in, and were too old to start in to winter. The honey they gathered, too, contained so much acid that it helped the cholera along. Then the unprecedented cold winter finished the business for them. But I am digressing. We had but few bees here the summer of 1873 but what there were worked on grapes again in the fall. As before I could not find that they were the first to begin, but only picked up what would spoil. I shall give my attention to it again this fall as I have the grapes yet, and a good crop too, if nothing happens to it. I do not even think they will work on damaged grapes at all if there is any honey to be gathered from flowers. We now have some 60 or 70 stocks of bees here, mostly Italians, of which number I have about 25. They did well in June and the first part of July, but since then, until yesterday, it has been very dry; and they only got enough to keep brood well going. They are at work now on buckwheat. We "bee-keepers" furnished the seed for a neighbor to sow about 10 acres and the bees are just swarming on it. I sent to Wisconsin and got the seed and it is the best variety for honey and grain also. Wishing the consolidated JOURNAL success I remain Respectfully,

J. W. CRAMER.

Knox Co., Ill.

Jefferson County Bee-Keepers Meeting.

Pursuant to a notice for a meeting of the Bee-Keepers in Jefferson County a goodly number assembled at the farm of Adam Robisch, three miles north of the village of Jefferson, August 16th, 1874, for the purpose of organizing an association and discussing the different vital questions arising in bee culture. There were 15 bee-keepers present and reported that over 2400 stocks of bees are kept in the neighborhood of the village of Jefferson, but they could not report the yield of the surplus honey at the present time, because bees are not through making honey and that nearly all of the comb honey is in the hives yet.

The meeting being called to order the following officers were elected:—C. Grimm, President *pro tem* and William Wolf, Sec'y.

Moved by A. Robisch, that a committee to be appointed by the chair to present different questions to be discussed in this meet-

ing. The committee reported the following questions to be discussed. Is the Italian bee superior to the Hybrids or Natives? 2. Is artificial swarming as good as natural? 3. Is upward ventilation necessary after bees are housed in the cellar as repository? 4. Is the single hive as good as the double-story hive for extracting?

All the above questions were warmly discussed and the result to the first question was, that Italian are not superior to a good Hybrid in storing surplus honey in boxes, but are superior in gathering honey when empty combs can be given and extracted. Natives or Blacks are nowhere. The second question showed a large preponderance in favor of natural swarming, and artificial swarming or dividing should only be done when a quick increase of stocks are wanted. The opinions to the third question was general, that upward ventilation should be given to bees in damp cellars or repositories, but are not necessary in dry places. The fourth question was answered to that effect that the single story hive is preferable in a mild and cool season, but in a hard season the two story hives are better for extracting honey and handier for handling the bees when we do not extract.

Moved by Wm. Wolf, not to organize and elect officers this meeting, but to appoint a committee of three to draw a constitution and report next meeting, carried. Wolf, Fuerbringer and Roepler was appointed to serve as said committee. Meeting adjourned until the 13th day of September, 1874, at one o'clock P. M., at Wm. Wolf's residence.

WM. WOLF, Sec'y. pro tem. C. GRIMM, President pro tem.

For the American Bee Journal.

Chips From Sweet Home.

Many bee-keepers are like ourselves—few bees and many hives and combs. How can we get a quantity of honey and a large increase?

We will tell you how we do. Many of our hives were very weak. We took from the strong and gave to the weak, till we had all strong. Then from our best queen we raised queens, and as soon as they were ready, we formed nuclei by taking two combs and cutting out brood and adhering bees, from two different hives. These we put in a new hive on the right side—as we face the hive—and put in a division board. A few minutes or an hour after forming we give them a young queen. Or another way, but a little more trouble, when your queen cells are capped—on the eighth or ninth day—put one in each comb, and leave one day to fasten; then give one of these frames to nuclei, and all or more bees than adhere to the frame and comb of cutting brood

from another hive. We mark on our slate, "Aug. 2.—Got y. q." In five or six days we look at them and if queen is seen, we say, "Aug. 7.—Saw q." If she is out of the cell, and we don't see her, we write, "Aug. 7.—Q. out." In a few days we examine and find the queen laying; we mark, "Aug. 12.—Eggs." If the weather is warm we look at them in four days, but if cool, not for six or seven days, and supply them with a comb of cutting brood and an empty comb, and write on slate, "Aug. 16.—O. K." Thus we continue, and in from two weeks to a month we make a strong colony of them. If they fill in too much honey, we sling out, so as to give the queen "elbow room." When every comb is full of brood and the hive crowded with bees, we put on our boxes; or, if we wish to sling, an upper set of combs. If for box honey, we take off boxes once a month and put those combs with most brood outside, and those filled honey, we sling and put inside—thus we keep a greater quantity of brood rearing, and consequently more honey stored. When we have tested the queen we mark on slate, if pure, "I. Q.," if hybrid, "H. Q. 1874."

Readers will remember that Sweet Home has a continual average flow of honey the whole honey season.

We wrote "Novice" about the slate, and he speaks of them in a manner to appear as though we carried a "slate and pencil" around with us, and then he refers to his "Queen Register Cards," illustrated in his number. (See *Gleanings*, page 267.) These slates are the cheapest and most convenient register we have used. When we wish to make a new entry on the slate we erase the old. Sometimes we would wish to make a note, which we could not do on the slate. If we have anything special, we can write on out side of slate—such as "Feeding or gave queen, or queen cells, Aug 4," etc.

Eliza, Ill.

D. D. PALMER.

A Proposition.

"Can the time of Swarming be controlled?"

We know if we place a queen cell in a colony of bees without removing the queen, the cell will be destroyed.

The writer proposes the following experiment to his aparian friends: Isolate one or two combs from the rest of the hive, without removing them from the hive, and so arrange the division board that the bees may retain the same scent, and let the bees make queen cells. At the expiration of eight or nine days withdraw the division, whatever it may be—whether of glass, wood, or wire cloth, or a combination of all three—and as the bees are of the same scent, it is possible the old queen may depart with a swarm. C. C. MILLETT.

Notes AND Queries

I see noticed, in your excellent journal, that in weak colonies the queen often lays two and sometimes three eggs in one cell. Now I would like to ask what is the result? Do bees remove one of them, or do they destroy both, as only one bee can be raised in a cell?

GEO. D. SELVINS.

It is said that the bees eat their surplus eggs. We never saw them do it, and we never saw them remove them; but they probably do one or the other.

The Lindon was very rich with sweet in this part of the State. I have taken from one stock, between June 17 and July 24, over 200 pounds surplus.

L. J. DIEHL.

Good enough for one stock.

MRS. TUPPER:—Inclosed you will find two samples of honey, one taken last fall and gathered from a species of *Coreopsis* improperly called here *Spanishneedles*; the other was gathered from honey dew and is as good as any of the spring honey I have ever got here.

We have generally two honey harvests in this part of Illinois during the year. The first from the 1st of May to the middle of June, the second from the last of Aug. to the last of September. The fall harvest is without question the harvest here for honey, in quantity as well as quality the bees storing it with surprising rapidity.

The spring harvest I intend to use hereafter exclusively for increasing and strengthening my colonies, letting them keep all their honey gathered in the spring until the hot and unusually dry season of July and August when it is usually all gone before the fall harvest comes on.

I know the above is not the instructions usually given but I am satisfied if a man wishes to make bee-keeping a success he must study the resources of his own locality and govern himself accordingly. The natural instincts of the honey bee are the same north or south, but the manipulations of the apiary has to be varied according to climate, honey resources, etc. I winter my bees on their summer stands. I expect that some of your readers are ready to say how improvident, but I have wintered in that manner for the last 15 years and have never lost a single colony in wintering and never saw a case of dysentery, neither do I want to; how many of your readers can say as much? I am satisfied with the results but would not recommend it to my

brother bee-keepers as a pattern, believing as I do that it is the superior quality of the honey gathered in the fall that produces the result.

Respectfully, D. M. L.

Clay Co., Ill.

The honey sent is of excellent quality, and both kinds are new to us in flavor. Our correspondent is correct in his premises and in his conclusions. We *must* study our honey resources and the season of them and adapt our management of the bees them and to the climate where we keep them. Let us hear from bee-keepers in all parts of the country.

DEAR EDITOR:—The first stand of hives I bought was two feet long, eighteen inches wide and eight inches deep, and a cap of equal size for boxes. Shall I continue to have hives made like this or change at once? These are easily and cheaply made, and if one does not intend to use an extractor, will they not do?

A swarm came from a hive like this the 1st of June. After great difficulty they were prevailed upon to settle and go into a new hive; they were not contented, and in a day or two went back in the old hive—they seemed to gather in the honey-boxes above. I then removed the honey-boxes to the new hive and placed it where the old one had stood, removing the old one ten feet away. At this time both swarms seem contented, although the old one for a time would have great clusters of bees hanging about the entrance. The old swarm seems to be making no honey in the boxes.

The new swarm has filled, perhaps, one-third of the lower chamber with beautiful, white comb, and partly filled with honey. I drove the bees from two of the boxes. I had moved and turned them upside down. The remaining box was partly filled with honey—it is always full of bees, and the honey in the cells seems to be getting dark and they add nothing to it. I fancy the queen went immediately to this box when she re-entered the old hive and is rearing brood there. This may be a very absurd idea. If so, I shan't be offended if you laugh. The new swarm certainly must have a queen or they would not work. If they have her now, they must have had her during the week that they remained in the old hive before I removed the boxes.

MRS. VIRGINIA C. MEREDITH.

Your form of hive is as good as any can be that has no movable combs—but these are really indispensable to successful bee-keeping; because, they enable you to find out at any time the exact condition of your bees, and if anything is wrong, to apply

the remedy. Make the hive as simple as you please, but have movable frames in it. If you do not want to use the extractor now, you will soon find it a great help in keeping bees strong, and making them profitable.

You managed well with your bees, and your "fancy" that the queen went into the boxes is true, no doubt.

DEAR EDITOR:—Is there any rule about using the extractor? Would you extract all the frames in a hive but those containing brood and larval, queen cells, &c.? or would you prefer taking the outside frames?

Where you extract thoroughly, is it, in your experience, that they will fill boxes at the same time?

2. Is there any danger in opening hives after the bees leaving—say twice in a week? An old bee-keeper says there is; that they know more than we think, and finding their stores unsafe will be apt to leave. He is a man of intelligence and large experience, having made a business of bee-keeping for many years.

3. Would you expect any trouble in introducing queens to queenless stocks at the close of the basswood season? I wished to do so, but the same authority dissuaded me from it—although I should have bought them of him—saying they would certainly be destroyed. My opinion is that he is wrong. Please enlighten me.

E. LAMBE.

We have no rule about using the extractor. During a good yield of honey, would always take all we could get without disturbing brood. At other times would take only enough to give empty cells for the bees to cluster in.

We have had bees work steadily in boxes while we were extracting honey from the main hive, every third day—but these cases are the exception, not the rule. When able to use the extractor, we don't put on boxes, with our present light. Mr. Dale, a successful bee-keeper of our State, writes us: "I know that extracted honey can be produced for at least one-third of comb honey." We make even more difference than this in the value.

2. There is no danger in opening hives too often, if there is any object in it. We have opened hives to show visitors queens of special interest every day for weeks, and had them do even better than other hives seldom disturbed. One colony containing

a queen of remarkable beauty, several years ago, was opened nearly every day for the season, and we obtained that year 196 lbs. of honey from it! No bees ever left because too often handled.

3. We prefer to introduce queens late in the season. It is, for us, *the* time of all others, but there is no risk at any time, if it is done in the right way.

DEAR EDITOR:—In the June number of the BEE JOURNAL you are asked for a description of the bee quilt. I am a beginner in the culture of bees, and wish only for further information as regards the quilt. Is it to be kept on in addition to the cap? Do you recommend its use for the entire year, or for winter only? If kept on during summer, will it not interfere with proper ventilation?

MRS. R. F. GREEN.

We would keep it on the entire year, except when we put in extra frames or boxes. Is it laid over the frames instead of any honey-board. It will not interfere at any time with necessary ventilation.

I am just a beginner in bee-culture, and look for you to help me along.

I started last spring with one colony of Italian bees; increased it to three that summer; two died through the winter, and left me one very strong, good, healthy colony. I looked to them in June (spring was exceedingly late here) when they had some brood, and some honey. I again looked to them the 17th of July, and found plenty of bees, a good deal of brood, but not an ounce of honey in store. What can be the matter? Is there possibly too many drones in the hive? How many drones should there be in proportion to the bees?

How long before a hive can safely be moved back again, after having been replaced by a newly made colony?

There is an abundance of lucern, alsike, red clover, and flowers around the bees, so they do not starve, and it seems unnatural that they should gather no more than what they consume.

MRS. HELENA MADSEN.

We should say that honey had not been very abundant in your locality; and bees being not very plenty in the hive, it had taken all they could gather to raise bees, and they had none to spare. A dozen drones is enough in a hive, if you can prevent the colony raising more; indeed they would do well without any, *if you could make them think it so!*

We would not move the hive back, after

being replaced by a new swarm, until another season.

Bloom may be very abundant, without yielding any honey. It depends on the state of the atmosphere. If there is honey, the bees will find it in all cases.

DEAR EDITOR :—I would like to know something more about those small frames that you use in place of small honey-boxes, to get comb-honey.

1. What shape is best to use, in order to get the bees to work in them the soonest?
2. How do you make them?
3. Do you put them in glass boxes upon sending them to market?
4. What sized boxes then?
5. Does not honey improve in flavor the longer it is in the hive above the bees, after it is sealed over?
6. Does not dark honey cause the bees to build dark combs?

Mercer Co. Pa.

PETER MOYER.

1. We do not think the bees have any preference for one shape or size over another.

2. We make the frames 6 inches deep by 9 long, as that size is as good as can be for market.

3. Make them just like the large frames.

4. We put them in glass boxes for show sometimes, but it does not pay.

5. The honey is best when it is removed as soon as sealed over.

6. Some dark honey is stored in light comb seemingly made from the same honey, but the honey from Golden Rod is very yellow in color, *if bees build any comb to store it in*, which is not always the case, as bees are loth to build comb late in the fall.

1. What is the best manner of wintering surplus queens?

2. Is box and frame honey sold by net weight, or is the weight of box or frame charged for same as honey?

3. Are hybrids from black queens as good honey gatherers as hybrids from Italian queens?

4. Has any one tried the queen nursery with a special entrance away from the main entrance to the hive? and with what success?

5. I am experimenting with a nursery on top of the hive, with special entrances to the queen cages. Has any one tried that plan? and with what success?

W. C. P.

1. We have never succeeded well in wintering surplus queens, not well enough to

give advice in the matter. All we ever brought through, except in full colonies, cost us more than their value.

2. We sell it always by gross weight, but to do this the boxes and frames must be made very light.

3. We think not.

4 & 5. We have not tried any such plans. Let those who have, report.

Will you answer through the JOURNAL these questions.

1. I have two queens that breed drones. That for the first two or three weeks their eyes are bluish white, the color of skim-milk, I never saw the like before, nor have I ever seen one word from writers, on this feature of drones. Their head is often white as well as the eyes; now if this is any mark of purity we all ought to know it as soon as possible.

2. I had a hybrid queen; her progeny were as black as any. I killed her. They built queen cells. I destroyed all, as I thought, and put in cells from a pure queen, but I had missed killing all the young queens, so one day I had the mortification of seeing a large swarm start and go to the mountains. This was a young queen not fertile. Now tell me will the swarm stay in a tree while she goes out to meet the drones? this also is a question we all ought to know. WILLIAM REYNOLDS.

Westmorland Co. Pa.

We have never seen any drones like those described. Should regard it as a freak of nature—instead of a mark of purity or impurity.

As to the young queen who went with her bees to the woods—she would probably be fertilized before reaching the tree; if not, the swarm would be affected by her uneasiness and come out when she did, flying round until she was ready to return with them.

Can bees be taken from Detroit, without honey in the hive and but little combs, and carried south to some good locality in Northern Georgia, Alabama or Mississippi—during the last half of September, and after that gather *honey and bee bread* sufficient to winter them?

Should I carry them on cars—tarvel with them in person—feed them, &c., on route. Please give your opinion and designate some good localities, also give address of any southern bee-keeper, and ask several to write me and send particulars.

There is no trouble in moving the bees, prepared in that way, to any point of the

country—at any season of the year; but whether they would gather honey and bee bread to winter on after arrival would depend on where you went—if they did not do it you could feed them with sugar syrup.

Will some southern bee-keepers give advice as to locality.

DEAR EDITOR:—According to promise I will let you know more of my experience about bees. When I first commenced with bees, being a professed bee-hunter, I went to the woods and found my bees, many of which went in at the root of within a few feet of the ground. I cut them off a suitable length and transferred them home and from them I obtained a good swarm. Lumber at that time being scarce I went to the linn timber and found some with small hollows and cut them suitable lengths and with thin long wedges hollowed them as thin as I wanted which should be $1\frac{1}{4}$ or 2 inches thick put on a tight head and good cap, with a few holes to communicate with the hive, and four pieces of timber nailed below, outside, for legs, to stand one or two inches from the ground, and when I had a swarm I set on the ground where it suited best, and my bees did well. As long as I used good round hives there was no trouble about wintering, and to this day I believe bees will do and winter better in a good round hive than a plank one. At the beginning of cold weather take long hay or rye straw and twist a rope and wrap your hives from bottom to top and let them stand where they summered, and I will guarantee the bees to winter without much loss. My bees have never wintered so well as in the open air in plank hives and it is essential for them to be sheltered from cold storms in plank hives.

It makes no difference how well a plank hive is made, wet and dry, cold and hot, will shrink and swell more or less, and let the cold penetrate to the bees; and if I could easily obtain round hives, I would never put bee in any other; for I can put frames, in round hives, with but little more trouble than square ones. For commercial bee-raisers, who want to sell bees in place of honey, artificial swarming may do, provided they can find buyers, but for those who want surplus honey, I would advise to let bees swarm themselves. They understand their necessities best; if there is a flush honey season and fair weather, bees will always swarm in good season; if otherwise, I would rather they would not swarm. One swarm in one season, is all I want my bees to do. If more than one swarm occurs, the old hive and second swarm, are both liable to become a prey to the moth. The only security against the moth, is the strength of the bees themselves. I have

lost no strong colonies by moths, but several weak ones. All careful bee keepers should aim to keep strong swarms; if any are weak double them. One strong swarm, will make as much honey as two or three weak ones. A plain movable comb hive is a good thing, but an expensive, complicated hive, is what honey raisers don't want. Artificial swarms have never satisfied me, as well as natural swarms; therefore I bid them good bye. G. TRULLINGER.

We give Mr. Trullinger's opinion of "artificial swarms," as he calls them—being always glad to give both sides of any point, but we think, if he will divide his bees judiciously, and give it a fair trial, he will come nearer agreeing with us, than he now seems to do on this point.

I have one stand of bees *numerous* and in a thriving condition. Have raised a good many young, but do not show disposition to raise young queens or make much new comb. The hive (American) being nearly full of comb which they are filling with honey. Please advise the best course to pursue and oblige

Butler Co., Kansas. C. M. HUMPHREY.

Bees will not build new comb while they have old comb to fill—they only build it when they need it.—We would, in such a case, divide the colony if early enough in the season to make it sure that both colonies would fill up for winter;—if too late for that, let them alone.—We notice also that bees seldom swarm or make preparation to do it *while they have empty comb*; though they often swarm when the hive is half full of comb, leaving plenty of room to build more.

We have a plant growing here called bur-weed, some call it stick-tight, which is some of the greatest honey to fallen plants in existence. It blooms from May 10th until the end of June. It makes honey of a beautiful flavor, but dark, about like buckwheat. Now if this should find room in your schedule of bee seeds; and if you would like to invest, I can furnish it to you by the bushel. C. G. SILVER,

Mason Co., Mich.

We know that the honey from this plant is abundant, and of very choice flavor. By some it is esteemed one of the best, but we cannot advise any one to sow a weed like this, while there are other things,—like Alsike, white clover, rape, &c., that have a two-fold value.

With us, this weed is called "stick-tight." It is a great nuisance, if it does produce honey.

DEAR EDITOR:—My husband has a few stands of black bees which we manage on the old foggy plan, and I often have to hive them when he is absent. I like bees (although they sting me sometimes), so my husband has offered to give the bees to me, if I will care for them and study bee-keeping. A friend handed me the February number of your Journal to read, I am well pleased with it, and think it is just what I want.

It is a question, with the people in this country, as to whether bees do as well on a fruit farm. Some think they do better on account of so much peach and apple bloom; others think that eating so much ripe fruit is against them. Will you please give me your opinion about it? We have a large peach and apple orchard, some pears, grapes and strawberries.

MRS. D. SHELTON.

A fruit farm is one of the best places for bees. The bloom in the Spring just when they need the stimulus must counterbalance all injury from ripe fruit, of which none complain; we have never had any trouble, though always keeping bees near orchards.

DEAR EDITOR:—Enclosed please find a specimen of bees that are dying from a disease that is unknown in this vicinity; I cannot find any bee-keepers in this part of the country that know anything about it. It resembles the nit of a louse as much as anything. Whether it is a gum that they gather, or get on their feet, or a louse, or something else I cannot tell. Did you or any of your readers ever hear of such a pest. A great many bees are destroyed by it in this locality. This season has been uncommonly dry, and that may be the cause. I have 14 swarms in the Kidder compound frame hive, and every swarm is infested. All they do is to fight and carry off the diseased bee. WM. H. PAGE.

Branch Co., Mich.

We have never seen anything of the kind. If any one has noticed or heard of it, that can give any reasonable explanation, let us hear.

DEAR FRIEND:—Our only colony swarmed 15th of May; we had intended to divide them in a few days. The new swarm was very large and filled their empty hive with comb, brood and honey. In about two weeks, we then put a large honey box on the top (King's patent hive) which was also

nearly filled in about ten days, when they made a feint at swarming; came out, making a great noise, flew around, most of them lighting on a tree near by, but soon left and all went back to their old hive again.

Question. Why did they do so, and what should we have done with them? The next morning we divided them, as recommended in the April JOURNAL, only as we could not find the queen and there was no queen cell started, we put four frames of brood and honey into the empty hive, instead of two; moving the old hive to a new stand, which they soon refilled, but on examining it the other day, I found the new combs had no brood or eggs in them; nothing but honey.

Question. Is that a proof that they have no queen?

The other hive of that division is building up very slowly. I put young brood in it that they might rear themselves a queen. The hive that the swarm came out of, May 15th, we divided about two weeks afterwards, fearing they would swarm again. The hive left on the old stand is about built up, but the one we moved away is quite weak, and I think queenless. We have added young brood and empty queen cells. It looks as if a queen had hatched. How shall we strengthen it?

What shall we do to keep the bees from building crooked combs? We have waxed the frames, but for all that they will run them together. Do you know of anything that will prevent swelling from bee stings? I do not mind the hurt but I dislike the swelling, particularly when it blinds me for days.

BEULAH E. BETTS.

To question first, we answer that when they swarmed and then went back, the queen for some reason could not fly. From your account of what followed, we judge that she was lost in the grass or in some other way, and that when you divided and found no queen, there was none there! Both parts therefore had to rear a queen.

As honey was being gathered fast, then, they would store a great deal before they had a young queen ready to lay, and therefore the combs would be full. We think by this time you can easily tell if they have fertile queens.

Strengthen the weak one by giving it a frame of brood, ready to hatch from one of the others.

To have combs straight it is necessary to pay attention to the hives that are building comb. Direct the bees a little by turning any piece round that inclines to be crooked.

Start them right and they keep so. When you have straight combs already, put an empty frame between two full ones, and it must be built straight. We now allow no other comb building done, except between two straight worker combs in any hive.

Cold water applied at once, will in most cases prevent swelling from bee stings. The German Bee Sting Cure, advertised, is highly recommended. After all, prevention is better than cure; and when you learn to handle bees more easily, subduing them before opening hives, you will have no trouble from stings.

I had a new swarm that came out June 14, with a queen of fine size, but it has did no good in the way of young brood. It has laid no eggs. I would like you to state the cause, and oblige,

T. H. BASKETT.

We can give no cause, and would wait no longer for her majesty, but replace her with another, or brood to rear one. As it was a natural swarm, it would seem you must have drones.

DEAR EDITOR:—I write to you to get a little information.

1. Will bees gather honey and bee-bread, and store it in the hive when they have no queen?

2. Does the queen lay according to the population of the stock?

3. When there are but few bees in the hive, and the queen two or three years old, and does not lay eggs, is it not time to have a new queen?

4. What is the best way to make bees make comb? as I see a journal says: "if any one contemplated bee-keeping, he should spend one year in raising comb, then the next year he would be prepared to make bees pay." G. D. CAPEWELL.

1. Bees will gather both pollen and honey and store it when they have no queen. At such times they accumulate much bee-bread, because that is made for and consumed by the larvæ.

2. The queen seems to lay not only in proportion to the population of the stock, but to the amount of honey they either have on hand or are gathering. They seem too wise to use up all their stores to support brood, at the risk of their own starvation. But when they have a good surplus on hand, or are bringing in freely to the hive, then the queen lays in propor-

tion to it. If there are workers enough all the eggs are cherished; if not, some are lost.

3. We would not destroy such a queen until we had given her more bees, or put her into a strong colony. Have seen a queen in a nucleus, that hardly deposited any eggs; on being removed to a full colony, make one of the most prolific queens we ever saw.

4. We know of no other way to have bees make comb, than to provide large numbers of the bees with empty space, and plenty of honey, (if they do not get it) and arrange with the "clerk of the weather" for an unusual number of hot days. The gentleman referred to should "rise and explain."

1st. What is the difference in quality, if any, in honey from flowers of a tree, and honey from the leaves of the same tree known as honey-dew?

2nd. Will an Italian queen pure in her birth—mating with a black drone, ever produce entirely black workers?

3rd. Or will a hybrid queen mating with an Italian drone produce hybrids only?

J. A. E.

1st. There is no similarity either in taste or color. Honey stored from honey dew, so far as we have seen it, is dark in color and peculiar in taste—no matter from the leaves of what tree it is gathered.

2nd. An Italian queen so mated will produce some perfect Italian workers, some with one and two bands and many genuine black workers, as black as those from any black queen.

3rd. We have seen a hybrid queen, mated with an Italian drone that produced uniformly beautiful Italian bees—we never discovered one poorly marked. This is an exception, generally, we think a hybrid queen so mated would produce all kinds of progeny.

What should be the width of a hive, from one inside to the other, to contain 9 frames, and what would be the consequence if it should be a $\frac{1}{2}$ inch or inch larger or smaller?

Mrs. G. W. CHURCH.

Thirteen inches from one inside to the other is the orthodox width to contain nine frames. If it should be half an inch smaller it would crowd the combs too much; if half an inch larger it would not matter so much, provided the frames were all kept, in the first place, adjusted to their proper distances, and the vacant space kept at one side or the other. Some bee-keepers always allow a margin in this way, to secure more care in taking out the first frame. When it is so left, care is necessary when honey is plenty, to prevent the bees filling the vacant space with comb.

The American Bee Journal

W. F. CLARKE,
MRS. E. S. TUPPER, } EDITORS.

SEPTEMBER, 1874.

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Work for the Month.

Now is the time to look after surplus honey. Little or none will be stored during the remainder of the season, except where buckwheat abounds. Where there is abundance of buckwheat, it is well to empty the combs by the use of the extractor, and leave the bees to store up the buckwheat honey for themselves. They appear to like it, and to thrive on it, quite as well as on that which is more desirable for table use.

No good end is gained by leaving honey boxes in the hive after they are filled. Some think it is a protection against the moth miller, but better protection can be secured by removing them to a dry, cool cellar. Should any moth eggs hatch, the larvæ can be quickly destroyed by a dose of brimstone smoke. If boxes of honey are left in the hive, they are apt to depreciate in value, owing to their becoming dark in color, as the result of the bees running over the combs. Not unfrequently,

too, the surplus honey is all carried below, to the surprise and disappointment of the overconfiding bee-keeper.

It is therefore on various accounts desirable to remove the sulphur boxes as soon as the cells are filled and sealed over.

There are several ways of doing this, but the method adopted by Captain Hetherington is as good as any, and better than some. It is as follows:—Slip two pieces of tin under the box, then remove the box with one tin, which will keep the bees in, while the other tin will keep the bees from coming up from the hive below. Now turn the box bottom up on a board and place an empty box on it, removing the tin to let the bees pass up into the empty box. Remove and treat all the full boxes in the same way, rapping on them if necessary to force the bees to go up into the empty boxes, then slip the tin under each box and place them on the hive, when both tins should be withdrawn. Any boxes in which a few bees remain may be placed in a dark room with a small window, or a tub or barrel, covered by a thin cloth, which should be occasionally turned over to allow the bees clustering on the under side to return to the hive. Paste a paper over the holes in the boxes to keep out bees, ants, or moth-millers.

There is never any difficulty about selling nice, fresh, white, virgin honey, stored in clean boxes, and look so lusciously tempting that even an ascetic might be expected to bid a liberal price for it. While broken and black looking honey goes a begging for a market, box-honey in A 1 condition is always in demand. Generally speaking, as with other products of the farm, so with this, it is well to seize the early market. But very little is gained by holding over for better prices. Often there is waste and loss as the result of delay.

When the yield of honey fails, it is well to take precautions against robbing, especially in the case of weak stocks. Contracting the entrance will usually prevent this trouble. Bees are brave defenders of their citadels, if they have a chance to resist attack. Too wide an entrance gives the advantage to an invading force. Make the entrance a *Thermophylæ*, and the bees will defend it valiantly and successfully,

even though the colony be not a strong one.

Stocks that have swarmed should be examined, to see if they have fertile queens. Though a sight of the queen may not be obtained, yet the presence in the hive of of eggs and larvæ may be taken as evidence that there is one. Queenless colonies should be supplied with a queen-cell at once, and, if necessary, strengthened with bees and honey. It is well to have some surplus queens on hand to give to queenless colonies, even if they are not as pure as could be wished. "Better is a living dog than a dead lion." A common stock can be Italianized another year, but an extinct stock is a dead loss.

A careful inventory should how be taken of the condition of the apiary as to stores for the coming winter. Such hives as need feeding should be marked, and preparations made to give their inmates an opportunity of laying in what additional supplies may be needed. They must be furnished with syrup or whatever food it is determined to give them, before the nights get too cool to admit of their working. To guard against robbing, which is very apt to take place during the feeding process, they should be fed in the evening, so that before morning their task of storing will be done, and no unusual stir be observed by other bees, else marauders will be attracted, battles fought, and stores pillaged. If any stocks are weak in numbers, as well as deficient in stores, feeding will have a tendency to stimulate the queen to lay, and the hives will become recruited with young bees, before winter sets in. C.

Honey Resources of the Prairie.

The question very frequently comes to us, "Can bees be kept on the virgin prairies of the West?" The impression seems to be general that away from timber there is little for bees to gather after May. This may be true in a measure; after the prairies are settled up and many cattle are kept that eat the pasture close—weeds, flowers and all. But on the new prairies there will be found most abundant bloom, all kinds of which afford honey in honey weather. Reports from those who have tried keeping bees in new sections of the West have been good, invariably. On a recent trip by stage, over a hundred miles or

more of prairie, fellow-passengers remarked "there was no chance for bees here, away from even the sight of a tree!" We called attention to the flowers on every hand, of several varieties, besides the countless acres of Golden Rod in every stage, from bud to full bloom. We did not cross one half mile of prairie that could not afford honey for 20 or 30 colonies.

In the Spring there are numerous other honey-producing flowers, giving good success throughout the season—except it may be in July.

We are of the impression that no quarter section of prairie can be found where bees may not be kept with profit by following directions often given, providing water and keeping only strong colonies.

If the country is settled up—unless clover is raised—other honey plants must be provided to take the places of those destroyed by cattle—but while the prairie is new we warrant success.

The income of four or five stands of bees and the honey afforded for the family would make a most valuable addition to the comfort of the "home trade." T.

Seasonable Hints.

More of the success in wintering bees depends on their care in September than a "Novice" would easily believe. The way with many is to "guess they are all right," and let them alone, until it is too late in the season to make any changes to good advantage. As soon as frost comes the honey secretion ceases, and no more can be expected from bees for the season.

An examination of all stocks should be made before that time, as it is much easier doing it while they are still flying briskly. Some hives will be found to have a good proportion of bees and honey, and may be marked as safe for winter. Others may have bees and comb enough with scanty stores; these may profitably be fed some sugar-syrup or honey, and will then make good colonies for the winter.

If there are any hives half full of comb, and with too few bees for safety, they may be united, and two of them will make one of more value than any number of weak ones that are sure to perish during winter, unless extra pains are taken with them.

There is no trouble in uniting two or more colonies. When the bees of both are alarmed and induced to fill themselves with honey, they will unite peaceably.

Our way is: To take away the queen of one of the colonies to be united a few days before doing it; then thoroughly smoke or sprinkle the bees of both hives; select the best and

fullest combs from both, taking care to place two or more with some empty cells near the centre of the hive in which they are to remain; brush the bees from both hives before the entrance of it; put away any surplus combs for another season—and the work is done.

We do it more easily, when there is a loose bottom board to the hives, by setting the hives—first one and then another—over an empty hive; then, brushing the bees from all the combs into this empty hive, and arranging the best combs in the upper one, close all up and allow them to go up among the combs at their leisure. They will be found like one colony the next day, when the lower hive may be removed. We used to think it trouble in making bees adhere to a new location. After being united, of course, the bees of one of the hives must be in a strange spot, but we find that after such a stirring up as they get in this process, each bee seems naturally to make a new departure. T.


The committee appointed at the meeting of the North American Bee Keepers' Society to provide essays on interesting topics for the coming meeting at Pittsburg, earnestly request those who are writing such essays, or desirous of doing so, to report soon to either members of the committee. No time should be lost, as it is necessary to place the essays in the hands of the critics early in October.

There are bee-keepers in every part of the country competent to write essays full of interest and instruction. Let us hear from them. Report to either members of the committee.

N. G. MURRY, Memphis, Tenn.

E. S. TUPPER, Des Moines, Iowa.

G. S. HILL, Mt. Healthy, O.

 My Straw Mats are reduced in price to \$4.00 per dozen, or 50 cents each for a less number. See advertisement. They will last many years and remain as good as new. Put them on when cold weather commences—the latter part of October—and take them off when the bees commence to gather honey, and there will be no propolis on them. The Mats are very much more convenient than cobs, leaves, &c. Sample Mats can be seen at the Chicago office of the AMERICAN BEE JOURNAL, and at the office of *Gleanings in Bee Culture*, Medina, Ohio. Mats cannot be made by the process given in the June number of *Gleanings*, that will compare in any respect with these samples. M. NEVINS.

Mrs. S. E. SPAIDS, as will be seen by advertisement in another page, has removed to New York, having been burned out at the late fire in Chicago on the 14th of July. She states that she is prepared to pay cash for honey promptly.

Voices From Among the Hives.

D. A. PIKE, Maryland, writes:—"The first part of the season was good here; then it became dry, but it is now good again for honey."

"NOVICE" writes:—"Allow me to congratulate you on the consolidation of two such valuable journals as the AMERICAN BEE JOURNAL and the NATIONAL BEE JOURNAL, as our American bee literature will thus come nearer our common ground."

F. GRABBE, Wilmette, writes:—"I am glad to hear of the consolidation. The 'old and reliable' AMERICAN BEE JOURNAL is conceded to be the best medium for disseminating information, contributed by the most successful and scientific bee-keepers in the world; and now with the consolidation of the NATIONAL BEE JOURNAL, will be the standard authority and CHAMPION."

DR. BAKER, of Berks County, Pa., writes that he is "very glad to learn that the old AMERICAN BEE JOURNAL is consolidated with the NATIONAL, and hopes that bee-keepers will give it that generous support that it so richly deserves."

JAS. G. TETER, Farmington, Minn., writes that "the Globe Microscope, advertised in the NATIONAL BEE JOURNAL a few times, is a fraud." We know nothing of it, but suppose it may be as he states. Due caution should always be used about such matters.

MICHAEL SORRICK, Clinton, Iowa, writes:—"Bees are doing well at present. They are gathering honey fast. The season has been fair all through. I feel glad to see the consolidation of the two Journals."

JOHN F. DIPMAN, Fremont, O., writes:—"I was glad when I noticed the consolidation of the two Journals. Bees have done well this season on Basswood, white clover being a failure, on account of dry weather."

WALTER NEWTON, Derby Line, Vt., writes:—"If it is of any interest to you to listen to our 'voice from among the hives,' permit me to say that we never have had dysentery among our bees. We winter them on their own stores, taking away their surplus in the spring. I use the Langstroth hive altogether. We pile them two hives high, in upper chambers of the house, give them plenty of air, and never have any dampness. Our old swarms refuse entirely to work in the boxes this year, so that we have to remove the frames. Our forced swarms are very heavy, with an average of 110 lb. box of frame honey. Their forage is 32 acres of alsike clover. After reading your Journal, we find we have much to learn, and intend experimenting next spring."

W. M. KELLOGG, Oneida, Ill., writes:—"I am very much pleased at the consolidation of the two great Bee Journals."

G. W. ZIMMERMAN, Napoleon, O., writes:—"Bees have done well here during the white clover and basswood bloom. They are not doing so well now. We have about 3,000 pounds of clover and basswood honey on hand, all extracted, which we are offering at 16 cents per pound."

JOSEPH JONES, Centre Co., Pa., writes:—"My bees have not done very well so far this season. Commenced with ten stocks, the season is very late and cold—June and July very dry. Increased to fifteen. No surplus honey yet. The prospects for buckwheat are good and we think we may get some surplus yet."

American Bee Journal

THOMAS G. NEWMAN, MANAGER.

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The German Bee-Sting Cure can be obtained at this office. Sent by Express for \$1.00. It cannot be sent by mail. See notice.

Our subscribers in Europe, can now procure Postal Money Orders on Chicago. This plan of sending money is safe and economical.

FRANK SEARLES, Hadley, Will Co., Ills., has 50 swarms of Italian Bees which he will sell for \$8.00 each, in any amount, if sent for soon.

Subscribers wishing to change their post-office address, should mention their old address, as well as the one to which they wish it changed.

Persons writing to this office should either write their Name, Post-office, County and State plainly, or else cut off the label from the wrapper of their paper and enclose it.

JOURNALS are forwarded until an explicit order is received by the publishers for the discontinuance, and until payment of all arrearages is made as required by law.

We have received a Postal Order from Shanon, Wis., in an envelope containing nothing else. We do not know from whom it came, nor for what it was intended. Will some one inform us?

Honey Markets.

CHICAGO.—Choice white comb honey, 28 @30c; fair to good, 24@28c. Extracted, choice white, 14@16c; fair to good, 10@12c; strained, 8@10c.

CINCINNATI.—Quotations from Chas. F. Muth, 976 Central Ave.

Comb honey, 15@35c, according to the condition of the honey and the size of the box or frame. Extracted choice white clover honey, 16c. $\frac{3}{4}$ lb.

ST. LOUIS.—Quotations from W. G. Smith 419 North Main st.

Choice white comb, 25@29c; fair to good, 16@23c. Extracted choice white clover, 16@18c. Choice basswood honey, 14@16c; fair to good, extracted, 8@12c; strained, 6@10c.

NEW YORK.—Quotations from E. A. Walker, 135 Oakland st., Greenport, L. I.

White honey in small glass boxes, 25c; dark 15@20c. Strained honey, 8@12c. Cuban honey, \$1.00 $\frac{7}{8}$ gal. St. Domingo, and Mexican, 90@95 $\frac{7}{8}$ gal.

SAN FRANCISCO.—Quotations from Stearns and Smith, 423 Front st.

Our Market is weaker and stock very large. Outsiders, who do not make a business of handling honey, do not know where to sell and place it, and are selling at a sacrifice. We quote: Strained Southern Coast, at 7@10c; Comb, 12@20c; the latter figure for San Deigo, in Harbison frames.

STEARNS & SMITH.

Premium Queens.

Mrs. Tupper authorises us to say that she will still continue her offer of a tested Italian queen to be sent to anyone who procures four subscribers, and sends the names with \$8. This is a rare chance to procure a good queen at absolutely no cost, except the expenditure of time; and those acting as agents will find it easy to secure names for the consolidated JOURNAL during the approaching season of fairs and expositions. The queen will be sent promptly on receipt of names and money.

Any one ordering a Queen at the time of renewing or subscribing for the JOURNAL, will receive it and the AMERICAN BEE JOURNAL one year for \$6.

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W. M. BRACKETT.

Room 27, Tribune Building, Chicago, will take consignments of Honey and dispose of it to the best advantage, for those desiring such services, on commission. Or he is prepared to pay cash for honey on delivery.

Mr. Brackett is General Agent for the American Publishing Company in Chicago, and may be relied upon to act on the square.